

## FIBER OPTIC TEMPERATURE SENSOR

### TS5

#### Key Features

- Temperature range: -200 °C to +300 °C
- Electrically non-conductive
- Immunity to RFI, EMI, NMR and micro-wave radiation
- Resistance to high temperatures
- High accuracy
- Stable and repeatable measurements
- GaAs-based temperature sensor

#### Applications

- Animal health environments
- Catheter instrumentation
- Monitoring of animal body temperatures



# WEIDMANN

FIBER OPTIC  
TEMPERATURE SENSOR

# TS5

## TECHNICAL SPECIFICATION

Name of sensor	TS5
Measurement range *1	-200 °C to +300 °C
Inertia	Up to 19 K/s
Accuracy *2	+/- 0.2 K
Fiber Ø	200 µm
Sensor standard lengths	2 m up to 20 m
Connector type	ST with metallic ferrule (-40 to 85 °C)
Signal conditioner	Compatible with all Weidmann fiber optic thermometers

## DESCRIPTION

The fiber-optic temperature probe TS5, combines high resilience with a minimal probe diameter – especially suitable for catheter applications within a modern animal-health technology setup.

The fiber-optic probe TS5, provides measurement data at the speed of light with a response time of up to 19 K/s and an accuracy\*2 of +/- 0.2 K. The sensor tip with GaAs-Crystal (gallium arsenide) comes with a diameter of 0.55 mm being the thinnest fiber optic temperature probe of the WEIDMANN product line.

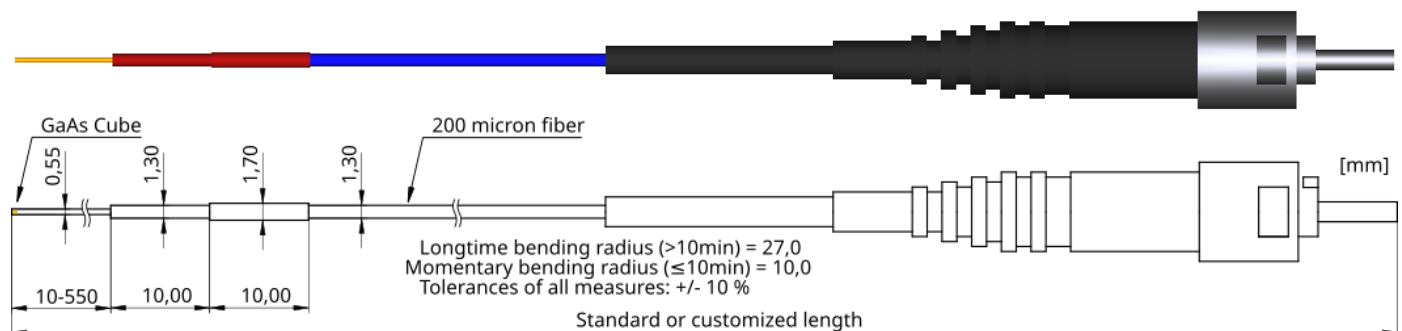
Moreover TS5 offers a customizable tip-length selectable between 10 mm to 550 mm for a measurement range of -200 °C to 300 °C. The small size of the TS5 temperature sensor enables for the usage in animal health applications, e.g. body temperature monitoring. The need for flexibility along with smallest diameter of sensor-tip for such applications, has been ascertained. Through its mechanical setup it is immune to RFI, EMI, NMR and microwave radiation.

All fiber-optic temperature sensors can be connected to the fiber-optic temperature measurement devices (FOTEMP) and provide accurate, reliable and repeatable data. The sensor cable can be offered in different lengths without influencing the accuracy of the measurement result. Alternative sensor-cables and connector types are also available upon request.

We are always anxious to adjust our offer to your special needs. In case of any further questions about individual measurement problems, lengths of sensors or connector types, please contact us.

**IMPORTANT NOTE:** This product has not been certified to be used in human body!

## DIMENSION



\*1 Long-term temperature range -200 °C up to +260 °C, short-term temperature range +260 °C up to +300 °C

\*2 Statement only possible with analysis unit. See data sheet of the measurement device for information about technical data.

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